

Leptospirosis

Synonyms

Weil's disease

Clinical Indication

Flu-like symptoms after contact with rat urine or with cattle or their products, may also cause jaundice, meningitis and kidney failure.

Part of Profile / See Also

Serology is the primary investigation for Leptospirosis diagnosis. The primary serological test performed will be an IgM ELISA.

Request Form

ICE / Medway order comms request or clearly handwritten Microbiology form [where order comms not available](#)

Availability / Frequency of Analysis

Samples will be referred to the Rare and Imported Pathogens Laboratory (RIPL), [UK Health Security Agency \(UK HSA\)](#), Porton Down 9304 for analysis:-

- **Serology** - IgM ELISA on Blood / serum. If positive, sample will be referred on to [UK HSA](#) Colindale for a MAT for confirmatory testing.
- **PCR on Blood** / serum (within 1 week of onset)
- **PCR on urine** (within 3 weeks of onset)
- **PCR on CSF and other samples** – this would require a discussion with the on call microbiologist

Turnaround Time

[12 working days](#)

Patient Preparation

N/A

Sample Requirements

Repeat IgM may be required as IgM may be negative early on in the disease.

Specimen Type

For serology:- Clotted blood sample (serum) or EDTA sample (plasma)

For PCR:- Serum, EDTA blood, plasma, urine, CSF, bronchoalveolar lavage and tissue may be tested if supplied with corresponding blood / serum sample.

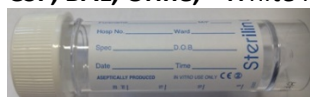
Volume

Serology - 1.5 mL preferred (500 µl minimum volume), serum, plasma

CSF - Minimum volume 250 µl

Container

CSF, BAL, Urine, - White lid universal container CE marked



Clotted blood / serum

Yellow top SST (adult) CE marked



Yellow top SST (Paediatric) CE marked



EDTA / plasma

Purple top CE marked



Purple top (paediatric) CE marked



Reference Range & Units

N/A

Interferences

Interpretation & Clinical

Decision Value (if applicable)

Leptospira 16s DNA detected by PCR / IgM Positive - suggestive of current or recent infection

References

See Appendix 2: Leptospirosis of the [UKHSA](#) Rare and Imported Pathogens Laboratory (RIPL) Specimen referral guidelines and service user manual
[UKHSA Porton Version 29, November 2024, Q-Pulse SPATH039](#)

Test code

LEP, [LEPP](#)

Lab Handling

On receipt at Pathology First, samples will be sent to RIPL at Porton Down for testing.



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